	Application No.	Applicant(s)
Notice of Allowability	10/608,448	SMOLYAR ET AL.
	Examiner	Art Unit	
	Sudhanshu C. Pathak	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Jan. 25th, 2007*.

2. ☒ The allowed claim(s) is/are *1-2, 5, 7, 9-14, 16, 18, 20-29 and re-numbered as claims 1-22 respectively*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

1. Claims 1-2, 5, 7, 9-14, 16, 18, 20-29 are pending in the application.

2. Claims 3-4, 6, 8, 15, 17, 19 have been canceled.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as

provided by 37 CFR 1.312. To ensure consideration of such an amendment, it

MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Caleb Pollack on April 11th, 2007.

In order to avoid 112 rejections the claims have been amended as follows.

➤ In Claim 1, line **after** line 6 **delete**

"assuming a probable transmission format based on the lowest metric calculated

for the transmitted block"

➤ In Claim 1, line **after** line 6 **insert**

"calculating a format metric for a possible bit value using a function:

$$FormatMetric = \frac{ViterbiMetric^2 - N \ln (2) / CodingRate}{2\sigma^2 N}$$

wherein $VertibiMetric^2$ is a squared Viterbi metric value for a format parameter, N

is the number of assumed transmitted bits corresponding to a format, $Sigma^2$ (σ^2)

represents the noise variance of the received block, and coding rate represents

the known encoding rate used for transmission for the received block;"

➤ **Cancel** Claim 4.

➢ **Cancel** Claim 6.

➢ <u>In Claim 7 line 8</u> **replace**

"assuming a probable transmission format based on the lowest metric

calculated;" **with**

"assuming a probable transmission format based on the lowest format metric

calculated;"

➢ <u>In Claim 13, lines 6-7</u> **replace**

"wherein the processor is to assume a probable transmission format based on

the lowest metric calculated" **with**

"wherein the processor is to calculate a format metric for a possible format

parameter using a function:

$$FormatMetric = \frac{ViterbiMetric^2 - N \ln (2) / CodingRate}{2\sigma^2 N}$$

wherein VertibiMetric^2 is a squared Viterbi metric value for a format parameter, N

is the number of assumed transmitted bits corresponding to a format, Sigma^2 (σ^2)

represents the noise variance of the received block, and coding rate represents

the known encoding rate used for transmission for the received block;"

➢ **Cancel** Claim 15.

➢ **Cancel** Claim 17.

➢ <u>In Claim 18, line 7-8</u> **replace**

"wherein the processor is to assume a probable transmission format based on

the lowest metric calculated;" **with**

"wherein the processor is to assume a probable transmission format based on the lowest format metric calculated;"

➤ In Claim 24, line 7-8 **replace**

"wherein the processor is to assume a probable transmission format based on the lowest metric calculated;" **with**

"wherein the processor is to assume a probable transmission format based on the lowest format metric calculated;"

➤ In Claim 27, lines 1-2 **replace**

"An article comprising a storage medium having stored thereon instructions that, when executed by a processing platform, result in:" **with**

"A computer readable medium storing a computer program that when executed by a computer result in:"

➤ In Claim 27 line 9 **replace**

"assuming a probable transmission format based on the lowest metric calculated;" **with**

"assuming a probable transmission format based on the lowest format metric calculated;"

Allowable Subject Matter

4. Claims 1-2, 5, 7, 9-14, 16, 18, 20-29 and re-numbered as claims 1-22 are allowed.

5. Claims 1-2, 5, 7, 9-14, 16, 18, 20-29 and re-numbered as claims 1-22 respectively are allowable over the prior art of record because the cited

references do not contain the specified limitation a method comprising:
calculating a plurality of Viterbi metric values for a plurality of possible format
parameters; calculating a format metric for said possible format parameters,
using the respective calculated Viterbi metric values and a decision level
variable; and determining a probable transmitted format for a transmitted block
by comparing the calculated format metrics for the possible format parameters;
assuming a probable transmission format based on the lowest format metric
calculated; and using a probable transmitted formula to decode the transmitted
block.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Sudhanshu C. Pathak whose telephone number
is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Chieh M. Fan can be reached on (571)-272-3042.

The fax phone number for the organization where this application or proceeding
is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-

272-1000.

Sudhanshu C. Pathak
Examiner
Art Unit 2611

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER